In the Claims

Please replace all prior versions, and listings, of claims in the application with the following list of claims:

Applicant submits below a complete listing of the current claims, including marked-up claims with insertions indicated by underlining and deletions indicated by strikeouts and/or double bracketing. This listing of claims will replace all prior versions, and listings, of claims in the application:

1.   (Original) A method of communicating with an integrated circuit chip having plural components thereon, said components including digital processing circuitry and an on-chip emulator connected to said digital processing circuitry for initiating command and control sequences for the digital processing circuitry in response to externally applied signals or in response to detected states of the digital processing circuitry, the method comprising:

providing universal serial bus having first and second ends, said first end being connected to said on-chip emulator;

providing a computer device having a digital processor, a universal serial bus port connected to said second end of said universal serial bus, and a second port for connection to a communication channel;

assigning at least one of said components with a respective address;

sending a remote procedure call from said component over said universal serial bus to said computer device, said remote procedure call including data indicative of the address of said component;

in response thereto, causing said computer device to generate a socket call over said communication channel thereby creating a first socket at said computer device and a second socket at a computer connected to said communication channel;

in said computer device, receiving a response at said first socket; and

sending information derived from said response over said universal serial bus to said component.

2.   (Original) A method of communicating with an integrated circuit chip having plural components thereon, said components including digital processing circuitry and an on-chip emulator connected to said digital processing circuitry for initiating command and control sequences for the digital processing circuitry in response to externally applied signals or in response to detected states of the digital processing circuitry, the method comprising:

providing a universal serial bus having first and second ends, said first end being connected to said on-chip emulator;

providing a computer device having a digital processor, a universal serial bus port connected to said second end of said universal serial bus, and a second port for connection to a communication channel;

assigning plural of said components with a respective address;

sending a remote procedure call from one of said plural components over said universal serial bus to said computer device, said remote procedure call including data indicative of another of said plural components;

in response thereto, causing said computer device to generate a socket call over said communication channel thereby creating a first socket at said computer device and a second socket at a computer connected to said communication channel;

in said computer device, receiving a response at said first socket; and

sending information derived from said response over said universal serial bus to said another component.

3.   (Original) The method of claim 2 further comprising implementing a proxy server process in said computer device, wherein said proxy server process implements said causing and sending steps.

4.   (Original)   The method of claim 2 wherein said communication channel comprises an Ethernet link.

5.   (Currently amended) The method of ~~any of~~ claim 2 wherein said communication channel comprises a telephone link.

6.   (Original) A system for communicating with an integrated circuit chip having plural components thereon, said components including digital processing circuitry and an on-chip emulator connected to said digital processing circuitry for initiating command and control sequences for the digital processing circuitry in response to externally applied signals or in response to detected states of the digital processing circuitry, the system comprising:

a universal serial bus having first and second ends, said first end being connected to said on-chip emulator;

a computer device having a digital processor, a universal serial bus port being connected to said second end of said universal serial bus, and a second port for connection to a communication channel;

generating circuitry associated with said component for sending a remote procedure call from said component over said universal serial bus to said computer device, wherein said remote procedure call comprises data indicative of said component;

conversion circuitry in said computer device for generating a socket call over said communication channel in response to a received remote procedure call thereby creating a first socket at said computer device and a second socket at a computer connected to said communication channel;

receiving circuitry in said computer device for receiving a response at said first socket; and

sending circuitry for sending information derived from said response over said universal serial bus to said component

7.   (Original) A system for communicating with an integrated circuit chip having plural components thereon, said components including digital processing circuitry and an on-chip emulator connected to said digital processing circuitry for initiating command and control sequences for the digital processing circuitry in response to externally applied signals or in response to detected states of the digital processing circuitry, the system comprising:

a universal serial bus having first and second ends, said first end being connected to said on-chip emulator;

a computer device having a digital processor, a universal serial bus port connected to said second end of said universal serial bus, and a second port for connection to a communication channel;

generating circuitry for sending a remote procedure call from one of said plural components over said universal serial bus to said computer device, including data indicative of another of said plural components;

conversion circuitry in said computer device for generating a socket call over said communication channel in response to a received remote procedure call thereby creating a first socket at said computer device and a second socket at a computer connected to said communication channel;

receiving circuitry in said computer device for receiving a response at said first socket; and

sending circuitry in said computer device for sending information derived from said response to said another component via said universal serial bus.

8.   (Original)   The system of claim 7 wherein said computer device comprises an interface device having a universal serial bus port and an Ethernet port for connection to a computer network, whereby said communication channel comprises said computer network.

9.   (Original)   The system of 7 wherein said communication channel comprises a telephone link.

10.   (Currently amended)   The system of any of claim 7 wherein said communication channel comprises the Internet.

11.   (New)   A method of communicating with an integrated circuit chip having plural components thereon, said components including digital processing circuitry and an on-chip emulator connected to said digital processing circuitry for initiating command and control sequences for the digital processing circuitry in response to externally applied signals or in response to detected states of the digital processing circuitry, the method comprising:

assigning at least one of said components with a respective address;

sending a remote procedure call from said component over a universal serial bus to a computer device, said remote procedure call including data indicative of the address of said component;

in response thereto, causing said computer device to generate a socket call over a communication channel thereby creating a first socket at said computer device and a second socket at a computer connected to said communication channel;

in said computer device, receiving a response at said first socket; and

sending information derived from said response over said universal serial bus to said component.

12.   (New) A method of communicating with an integrated circuit chip having plural components thereon, said components including digital processing circuitry and an on-chip emulator connected to said digital processing circuitry for initiating command and control sequences for the digital processing circuitry in response to externally applied signals or in response to detected states of the digital processing circuitry, the method comprising:

assigning plural of said components with a respective address;

sending a remote procedure call from one of said plural components over a universal serial bus to a computer device, said remote procedure call including data indicative of another of said plural components;

in response thereto, causing said computer device to generate a socket call over a communication channel thereby creating a first socket at said computer device and a second socket at a computer connected to said communication channel;

in said computer device, receiving a response at said first socket; and

sending information derived from said response over said universal serial bus to said another component.

13.   (New) The method of claim 12 further comprising implementing a proxy server process in said computer device, wherein said proxy server process implements said causing and sending steps.

14.   (New) The method of claim 12 wherein said communication channel comprises an Ethernet link.

15.   (New) The method of claim 12 wherein said communication channel comprises a telephone link.